

## CLARION



The Japanese tour operator has adopted Clarion's SurroundEye safe driving assistance system on its famous Astromega double-decker tourist bus. This video system uses multiple cameras to display information about the area surrounding the vehicle with a panoramic view. The internal monitor reproduces images taken from the four cameras mounted on the coach body as a single high-precision composite image using Clarion's proprietary image processing technology.

Customizable according to vehicle type, the SurroundEye system is adopted and installed in various types of vehicles, including cars, trucks and buses. ●

## BYD



At the annual European partner event (Stuttgart, April 10), BYD presented the latest generation of lithium energy storage systems named Battery Box LV. It is a 48-volt lithium storage system with battery capacities ranging from 3.5 to 14 kWh in one system with one to four modules. The

capacity can be scaled up to 42kWh with three systems connected in parallel. It is ideally suited for residential use and medium-size commercial applications. The system provides a high discharge power and higher usable energy ration than comparable systems in the market. It also employs BYD's patented innovative connection system which allows for an extremely easy plug- and-play installation without the need to connect cables. "2017 has been a very successful business year for the company", stated BYD in a press release. "From opening the first overseas branch in the Netherlands in 1998, BYD has expanded its global presence to 27 branches and more than 30 manufacturing sites and today is the world's largest supplier of rechargeable lithium iron phosphate batteries." ●

## HANKOOK



The SmartCity AU04+ is the new all-season city bus tyre developed by the worldwide manufacturer Hankook. The tread design has been improved with optimized rib spacing, stabilizing 3D tread blocks and optimized zig-zag grooves. All to the benefit of traction. In addition to the design, the shoulder width was also adapted and fins were removed in order to guarantee even more homogeneous wear.

"The improved structure of the new tread compound makes the tyre much more heat-resistant," adds Klaus Krause, Hankook's Vice President, "thus reducing wear and make a longer service life possible".

Like the AU03+, the SmartCity AU04+ also has a reinforced sidewall that protects the tyre from damage following contact with curbs.

SmartCity AU04+ is available in size 275/70R22.5 and has the M+S marking as well as the 3PMSF symbol (3 Peak Mountain Snowflake).

In addition to SmartCity AU04+, the complete range of Hankook urban tyres includes the AU03 and AU03+ versions. ●

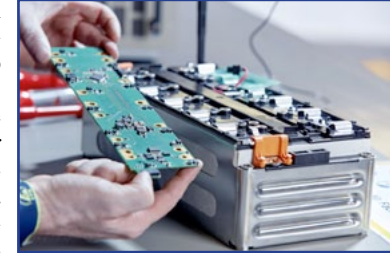
## FALKEN



Falken Tyre Europe, an affiliate of the Japanese tyre manufacturer Sumitomo Rubber Industries Ltd, presents the new high load index versions of the RI151 bus tyre. Tailored to meet the specific needs of regional bus and coach transport, it is ideal for all-round use. It bears the 3PMS (Three-Peak Mountain Snowflake) mark and its features make it suitable for all-weather conditions, even the most unfavorable. The manufacturer announces excellent performance in terms

of traction and mileage performance on both wet, dry or snowy roads, as well as ruggedness and durability. This model is fitted with Stone Ejectors, raised elements which prevent stones from lodging in the tread. The RI151 is available in 'high load' versions for sizes 295/80R22.5; 315/60R22.5 and 315/70R22.5, all of which are suitable for axle loads of up to 8 tons. The 'high-load' models have replaced their normal load index predecessors to rationalize and simplify the stocking. ●

## AKASOL



The German company Akasol is to deliver all battery systems to EvoBus for the Citaro electric bus. The new Mercedes-Benz city bus will premier at the IAA in Hannover next September (start of serial production is scheduled before the end of the year). The batteries have been developed by Akasol in close cooperation with EvoBus as well as Samsung with the work going as far back as 2015. Akasol's task for the Citaro is to assemble the power packs, using Samsung's cells, at the new facility in the town of Langen, close to its headquarters in Darmstadt. Up to ten Akasystem battery packs can fit into the vehicle, placed on the roof and in the rear of the bus. The maximum power output is 243 kWh. The batteries inside the Citaro are able to fast-charge and supply all on-board systems as well as the electric drive. With the water cooling, the packs are able to supply the electric bus for a range of 150 kilometres in almost any climate. "In the next few years», Akasol reports, "this range will be expanded. Winter testing have been successfully launched in Finland".

Akasol also includes VDL Bus & Coach and British Alexander Dennis among the customers for electric bus batteries. ●

## MAN-VHH



MAN and VHH have signed a 'memorandum of understanding' on reuse of batteries from electric buses to store energy at the depot for charging stations. The two partners want to jointly test the second life of batteries in a stationary storage facility. The prototype of the stationary storage facility is to start operating in Hamburg-Bergedorf during the course of the year. This involves working with used batteries obtained from vehicle testing, with cells of the type that will also be used in MAN's eBuses. The project is part of the mobility partnership between Free and Hanseatic City of Hamburg and Volkswagen Group. "This second life storage", said MAN Truck & Bus in a press release, "is designed to prevent power consumption peaks during bus charging (peak shaving) by filling up on charge during quieter periods, which the buses can then use at peak times. This saves costs and stabilises utilisation of the power grid, which is the intention of the participants". ●